

REMARKS

In regard to the Examiner's objection to the specification, Applicant does not comprehend the problem. The phrase "easy to don and use" is very clear, concise and conveys the terms Applicant wishes to convey namely that her Body Limb Movement Limiter is easy to put on (don) and easy to operate (use). The fact that Applicant used the term "easy" to modify both don and use is of no moment and is grammatically sound. If the term "don" is the source of confusion, it is clear that Applicant intends on the second meaning ascribed to don in the Oxford English Dictionary - put on (garment) - rather than the first that being the description of nobility or high rank. Accordingly, Applicant respectfully requests that this basis of objection be withdrawn or if not, for more clarification as to precisely the nature of the problem and possibly a proposed solution.

In regard to the Examiner's rejection of claims 1-3 and 6-10, under 35 U.S.C. 102(b) as being anticipated by Soubry et al., (Soubry) Applicant respectfully points out that Soubry fails to teach a non-Newtonian fluid disposed within the housing to provide a frictional force on the spool and retard rotation of the spool. The Soubry device does teach the use of a viscous fluid to fill a passage within a housing to provide frictional force on the spool to retard rotation of the spool in order to lower a person using the device to the ground at a safe rate of descent, col. 2, lines 34-37, col. 4, lines 18-25, Abstract. However, Soubry is completely silent as to the use of a non-Newtonian fluid and calls for an appropriate viscous fluid such as dimethyl siloxane. The fluid might have a viscosity of between 65,000 cSt. and 200,000 cSt., which is the nominal viscosity range for various dimethyl siloxane silicone oils and gels. The Soubry patent further provides that one of the factors determining the retardant force on the rotating spool exerted by the viscous fluid is the size of the opposed areas between the fixed member 23 and the interior surface of the spool, col. 4, lines 38-42. If the viscous fluid were non-Newtonian, then one of the factors, indeed one of the main factors determining the retardant force on the spool would be the shear rate (viscosity) of the fluid as a function of the shear force applied to the fluid, yet Soubry fails to mention this and it cannot be read into the disclosure. Soubry very clearly states "that

when a specific viscous fluid of a given viscosity is used, the rate of descent of a person of average weight is at a safe speed.” column 4, lines 29-32 emphasis supplied. Newtonian fluids are of a given viscosity, however, non-Newtonian fluids are of variable viscosity depending on the shear stress placed upon the fluid. Clearly, Soubry is calling for a specific viscosity for his fluid and is speaking of a Newtonian fluid and makes no reference or suggestion for the use of a non-Newtonian fluid nor does the device display a need that can be solved by the use of a non-Newtonian fluid versus a Newtonian fluid and such use cannot be read thereinto. The fact that Soubry describes a range of viscosities for the fluid used does not lend itself to a description of a non-Newtonian fluid. The range of 65,000 cSt to 200,000 cSt is typical for various dimethyl siloxane oils and gels and there is no implication for the use of a single such oil or gel. While it is possible to modify a dimethyl siloxane fluid to exhibit non-Newtonian properties, Applicant is only aware of dimethyl siloxanes displaying a pseudoplastic fluid-like non-Newtonian properties (viscosity lowered by increased shear force acting on the fluid) not dilatant non-Newtonian properties (increased viscosity with increased shear force acting on the fluid) as claimed by Applicant. Applicant respectfully points out support for the amendment to her claims to define the non-Newtonian fluid as a dilatant non-Newtonian fluid is found in the specifications at page 10, line 24 through page 11, line 10 and page 12, line 23 through page 13 line 7.

In regard to the Examiner’s rejection of claims 1-15 and 17 under 35 U.S.C 103(a) as being unpatentable over Kirkpatrick et al., (Kirkpatrick) in view of Soubry, Applicant respectfully points out that the combined teaching of Kirkpatrick and Soubry fail to teach or suggest a spool disposed within a housing and using a non-Newtonian fluid to retard rotation of the spool. As described above, the Soubry patent teaches the use of a Newtonian fluid to retard rotation of the spool and neither teaches nor suggests the use of a non-Newtonian fluid for retardation of rotation of the spool.

However, even assuming *arguendo* that Soubry does teach a non-Newtonian fluid to retard rotation of a spool, there exists absolutely no motivation to combine the teachings of Kirkpatrick with that of Soubry. The motivation given by the Examiner, as best understood,

appears to be aimed at solving the problem of providing take-up spools having frictional damping with methods to retard the rubbing or wearing away of the restraining tether. However, the Kirkpatrick device is a shooting aid for basketball players to help keep their elbows in during shooting. The tether is attached about the torso of the user and again about an elbow of the user and crosses the body of the user with the tether providing tension on the user's arm to keep the elbow at the centerline of the body or return the elbow to the centerline if the elbow strays. Kirkpatrick makes no mention nor suggestion of a problem with rubbing and wearing of the tether during use and if such were a problem, the user's body would become extremely raw and sore as the tether lays across the user's body during use. If the tether were to rub away during use, the user's clothing and possibly some skin and flesh on his torso would also rub away. The only way the Kirkpatrick device could possibly suffer wear problems on the tether is to first modify the Kirkpatrick device with a spool which spool suffers rub and wear problems. The rub and wear problems can then be solved by the teachings of Soubry which uses a fluid within the housing. However, this would provide motivation for solving a problem only after creating the problem in the first instance by modifying the non-problem device with the teachings of the solution. This is impermissible.

Nevertheless, modifying the Kirkpatrick device with the teachings of the Soubry device will destroy the very inventive intent of the Kirkpatrick device. The Kirkpatrick device is designed to provide tension onto the person's elbow toward the centerline of the body whereat the tensioning tether is anchored. As such, the tether provides a take-up on the elbow in order to pull the elbow toward body centerline. On the other hand, the Soubry device is a tether payout device for descent down a high rise. If the Kirkpatrick device were modified by the Soubry device, the intent of keeping the elbow at the centerline or tensioning it back to the centerline if the elbow strays would not be achieved as the Kirkpatrick invention intends. In fact, the Soubry device is designed not to provide spool take-up during normal device use, column 2, lines 37-44.

Lastly, and specifically with respect to claims 7 and 14, Applicant is unsure as to what the Examiner defines as the second chamber that is fluidly sealed from the first chamber and wherein

the second chamber has the non-Newtonian fluid therein. As seen in figure 4 of the Soubry patent, the spool is in fluid contact with the Newtonian fluid therein. The fluid is not in a separate chamber sealed from the spool. Therefore, any element that may be in a second chamber is not in contact with the fluid and sealed from the first chamber where the spool is found. Accordingly, Soubry fails to teach or suggest dual chambers with a reel in one, a rotor in another and fluidly sealed from the first with the non-Newtonian fluid in the rotor chamber.

Therefore, Applicant's device, as now claimed, is novel and non-obvious in light of the prior art.

In view of the foregoing remarks and amendments, it is respectfully submitted that this application is now in condition for allowance, therefore an early notice to this effect is courteously solicited.

Respectfully submitted,



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CERTIFICATE OF MAILING

I HEREBY CERTIFY that the foregoing was deposited with the United States Postal Service, First Class Postage prepaid, addressed to the Commissioner of Patents and Trademarks, this 1st day of July, 2004.



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